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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
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09/578,063 05/24/00 MCCARTHY

S 10147-6U1 (M)

000570 HM22/1002
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EXAMINER

JIANG, D

ART UNIT

PAPER NUMBER

1646

DATE MAILED:

10/02/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/578,063

Applicant(s)

MCCARTHY ET AL.

Examiner

Dong Jiang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-23 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - A. Claims 1-7 and 12, drawn to isolated nucleic acid molecules, vectors thereof, host cells, and methods of recombinant expression of such, classified in class 435, subclass 69.1.
 - B. Claims 8-10, drawn to isolated polypeptides, classified in class 530, subclass 350.
 - C. Claims 11 and 23, drawn to antibodies specific to said polypeptides, classified in class 530, subclass 387.9.
 - D. Claims 13 and 14, drawn to a method for detecting said polypeptide, classified in class 436, subclass 501.
 - E. Claim 15, drawn to a kit comprising a compound binding to said polypeptide, classified in class 436, subclass 808.
 - F. Claims 16-18, drawn to a method, and a kit for detecting said nucleic acid molecules, classified in class 435, subclass 6.
 - G. Claims 19, 20, and 22 drawn to a method for identifying a compound, classified in class 436, subclass 501.
 - H. Claim 21, drawn to a method for modulating the activity of said polypeptide, classified in class 435, subclass 7.1.

The inventions are distinct, each from the other because:

The nucleic acids of Invention A are related to the polypeptides of Invention B by virtue of encoding same. The DNA molecule has utility for the recombinant production of the protein in a host cell. Although the DNA molecules and proteins are related since the DNA encodes the specifically claimed protein, they are distinct inventions because they are physically and functionally distinct chemical entities, and the protein product can be made by another and materially different process, such as by synthetic peptide synthesis or purification from the natural source. Further, the DNA may be used for processes other than the production of the protein, such as nucleic acid hybridization assay of Invention F.

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The methods of Invention A are related to the proteins of Invention B as process of making and product made. The Inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP 806.05(f)). In the instant case the products as claimed may be isolated from their natural source or made by chemical peptide synthesis.

The products of Invention A are distinct and unrelated from the antibodies of Invention C because they are physically and functionally distinct chemical entities which share neither structure nor function. The methods of Invention A are distinct and unrelated from the antibodies of Invention C because the antibodies may be neither made by nor used in the method.

Inventions A and D are distinct and unrelated, wherein the products of Invention A can be neither made by nor used in the method of Inventions D, and wherein each does not require the other.

The products of Invention A is distinct and unrelated from the kit of Inventions E because they are physically and functionally distinct chemical entities which share neither structure nor function.

Inventions A and F are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product of Inventions A as claimed may be used for the production of the polypeptide of Invention B.

Invention A, and each of Inventions G - H are distinct and unrelated, wherein the products of Invention A can be neither made by nor used in the methods of Inventions G - H, and wherein each does not require the other.

The polypeptides of Invention B are related to the antibodies of Invention C by virtue of being the cognate antigen, necessary for the production of the antibodies. Although the protein and antibody are related due to the necessary steric complementarity of the two, they are distinct inventions because they are physically and functionally distinct chemical entities, and because the protein can be used another and materially different process from the use for

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production of the antibody, such as in a pharmaceutical composition in its own right, or in assays of Invention E for the identification of a compound binding to the polypeptide.

Invention B is related to each of Inventions D, G, and H as product and processes of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed may be used for the production of the antibody of Invention C.

The product of Invention B is distinct and unrelated from the kit of Inventions E because they are physically and functionally distinct chemical entities which share neither structure nor function.

Inventions B, and F are distinct and unrelated, wherein the products of Invention B can be neither made by nor used in the method of Invention F, and wherein each does not require the other.

Inventions C, and D are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed may be used for the purification of the polypeptide of Invention B.

The product of Invention C is distinct and unrelated from the kit of Inventions E because they are physically and functionally distinct chemical entities which share neither structure nor function.

Inventions C, and F - H are distinct and unrelated, wherein the products of Invention C can be neither made by nor used in the method of Invention F - H, and wherein each does not require the other.

Inventions E and D are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP

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§ 806.05(h)). In the instant case the product as claimed may be used for a method of treatment, or as an antigen for producing antibodies.

Inventions D and F are distinct and unrelated, wherein each does not require the other.

Inventions D, G, and H are drawn to methods for using the polypeptides, wherein each of the methods is distinct as each is a different assay, and requires independent testing objects, starting elements, reagents, and methods steps, such that they require non-coextensive searches.

Inventions E, and F - H are distinct and unrelated, wherein the product of Invention E can be neither made by nor used in the method of Invention F - H, and wherein each does not require the other.

Inventions F and G - H are distinct and unrelated, wherein each does not require the other.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and/or recognized divergent subject matter, restriction for examination purposes as indicated is proper.

2. Restriction to one of the following inventions is also required under 35 U.S.C. 121:

Groups I - LXXVIII, the inventions as they pertain to each of the claimed SEQ ID NOs, or ATCC numbers, classification dependent upon the nature of the inventions.

The corresponding group numbers are as follows:

Groups I - XVIII: SEQ ID No:1, 2, 9, 10, 17, 18, 25, 26, 33, 34, 45, 46, 53, 54, 67, 68, 72, and 73, respectively.

Groups XIX - XXIV: ATCC 207219, 207184, 207228, 207185, 207220, and 207221, respectively.

Groups XXV - XXX: SEQ ID No:3 - 8, respectively.

Groups XXXI - XXXVI: SEQ ID No:11 - 16, respectively.

Groups XXXVII - XLII: SEQ ID No:19 - 24, respectively.

Groups XLIII - XLVIII: SEQ ID No:27 - 32, respectively.

Groups XLIX - LVIII: SEQ ID No:35 - 44, respectively.

Groups LIX - LXIV: SEQ ID No:47 - 52, respectively.

Groups LXV - LXXVI: SEQ ID No:55 - 66, respectively.

Groups LXXVII - LXXVIII: SEQ ID No:69 and 74, respectively.

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The inventions are distinct, each from the other because of the following reasons:

Although there are no provisions under the section for "Relationship of Inventions" in M.P.E.P. § 806.05 for inventive groups that are directed to *different* products, restriction is deemed to be proper because these products constitute patentably distinct inventions for the following reasons. Each of SEQ ID NOs, or ATCC numbers is a unique sequence, requiring a unique search of the prior art. Searching all of the sequences in a single patent application would provide an undue search burden on the examiner and the USPTO's resources because of the non-coextensive nature of these searches.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

In order to be fully responsive, Applicant must elect one from Groups A - H, and one from I - LXXVIII even though the requirement is traversed. Applicant is advised that neither A - H nor I - LXXVIII are species election requirements; rather, each of A - H and I - LXXVIII is a restriction requirement.

Applicant is reminded that upon the cancellation of claims to a non - elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

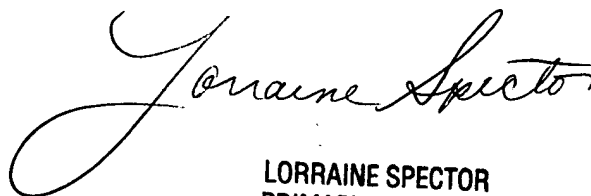
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Advisory Information

Any inquiry concerning this communication should be directed to Dong Jiang whose telephone number is (703) 305-1345. The examiner can normally be reached on Monday - Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler, can be reached on (703) 308-6564. The fax phone number for the organization where this application or proceeding is assigned is 703 - 308 - 0294.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 - 308 - 0196.

A handwritten signature in cursive script, reading "Lorraine Spector". The signature is written in black ink and is positioned above the printed name and title.

LORRAINE SPECTOR
PRIMARY EXAMINER

DJ
9/25/01